Abstract of the Disclosure

A method is for imaging in computer tomography, in which a periodically moved object to be examined is scanned with the aid of a beam of rays coming from a focus. A two-dimensionally designed detector array generates output data which are filtered in a suitable way and back-projected in order to obtain at least one sectional image which represents the absorption values of the section of the object to be examined in a particular movement state. In the method, on the one hand, a weighting function which weights the spatial distance of a ray in question from the voxel in question is used for the back-projection. Further, on the other hand, a weighting function which represents the time difference from the examination area movement state to be represented in each case is also used.